

LEMMENS et al
U.S. National Phase of PCT/EP2004/008009

AMENDMENTS TO THE ABSTRACT

Please insert the Abstract of the Disclosure which is on the attached sheet.

ABSTRACT OF THE DISCLOSURE

The invention relates to a process for purifying caprolactam, said process comprising (a) subjecting the caprolactam to a hydrogenation by treating the caprolactam with hydrogen in the presence of a heterogeneous nickel containing hydrogenation catalyst, (b) distilling at least a portion of the hydrogenated caprolactam in a distillation column containing nickel in an amount sufficiently low such that $\Delta\text{PAN}_{\text{Ni}} \leq 3$, wherein $\Delta\text{PAN}_{\text{Ni}} = \Delta\text{PAN} - \Delta\text{PAN}_{\text{Ni}=0}$, ΔPAN = increase of the PAN number of caprolactam during distilling, $\Delta\text{PAN}_{\text{Ni}=0}$ increase of the PAN number of caprolactam during distilling under the same conditions in a distillation column free of nickel. Nickel is removed from the caprolactam solution prior to the distillation step.